

# NURSING MANAGEMENT OF PAIN IN PEOPLE WITH COVID-19

## PAIN SYNDROMES COMMONLY REPORTED DURING COVID-19

- Arthralgias/myalgias due to infection, rigors
- Chest/thoracic/rib pain associated with persistent, severe cough
- Headache



- Sore throat
- Procedure-associated pain
- Exacerbation of chronic pain, especially in those with preexisting serious illness

## PHARMACOLOGIC MANAGEMENT: ACETAMINOPHEN

*For patients quarantined at home,* educate regarding acetaminophen content in many over-the-counter medications and the potential for overdose. Medications for a variety of conditions often contain acetaminophen:



- Antipyretic and analgesic but not anti-inflammatory
- Hepatic toxicity at doses  $\geq 4000$  mg per day or lower in elderly or those with liver disease



**SLEEP COUGH LETHARGY ARTHRITIS**  
**PAIN SINUS COLD HEADACHE**

## PHARMACOLOGIC MANAGEMENT: NSAIDS

- NSAIDs are antipyretic, analgesic, and anti-inflammatory
- The NIH COVID-19 Treatment Guidelines recommend that “persons with COVID-19 who are taking NSAIDs for a co-morbid condition should continue therapy as previously directed by their physician.”

## THERE ARE RISKS IN TAKING NSAIDS FOR ANYONE WITH A SERIOUS ILLNESS:

- Stroke/MI, particularly in people with pre-existing risk factors or a prior history
- GI Bleed
- Acute Kidney Injury, a common occurrence in people with COVID-19

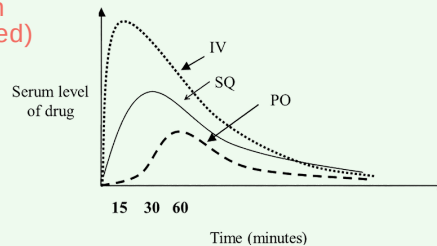


## PHARMACOLOGIC MANAGEMENT: OPIOIDS

*For moderate to severe pain (and anyone with a seriously illness with mild to moderate pain where NSAIDs and acetaminophen use limited)*

### Routes – helpful tips:

- Oral concentrated liquid (such as morphine or oxycodone) may be useful when dyspnea severe and swallowing tablets difficult
- Transdermal fentanyl or buprenorphine – limit use with fever due to rapid absorption, possible sedation/respiratory depression
- IV morphine, hydromorphone or fentanyl for inpatient/ICU use



Peak effect: helps guide re-dosing and time activity to maximum effect

When converting between opioids or from one route to another:

DRUG	IV/SQ	ORAL
Fentanyl IV	0.1mg=100mcg	NA
Hydrocodone/Acetaminophen	NA	30
Hydromorphone	1.5	7.5
Morphine	10	30
Oxycodone	NA	20
Tramadol	NA	120

## PHARMACOLOGIC MANAGEMENT: OTHER AGENTS

- **Gabapentinoids** - toxicity reported with chronic kidney disease or worsening acute renal failure, common in COVID-19
  - Renal dosing - If patient already on gabapentin or pregabalin for existing pain, dose reduce if CrClc < 60
  - Hepatic dosing – no adjustments warranted
- **Duloxetine**
  - Renal dosing - If patient already on duloxetine, decrease dose if CrClc < 90, avoid use or stop if  $\leq 30$
  - Hepatic dosing – avoid if pt with liver disease (Child-Pugh Class A, B, C)
- **Corticosteroids**
  - For patients on oral corticosteroid therapy for other conditions (e.g. cancer pain) prior to COVID-19, these should not be discontinued



## NONPHARMACOLOGIC MANAGEMENT



- Bracing with Pillow During Cough
- Distraction
- Heat
- Menthol topical
- Positioning
- Spiritual care

## REFERENCES

- American Association of Colleges of Nursing (AACN) and City of Hope (COH). (2020). End-of-Life Nursing Education Consortium (ELNEC). Accessed April 29, 2020 from: <https://www.aacnursing.org/ELNEC>
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- Paice, J.A. (2019). Pain management. In: B.R. Ferrell and J.A. Paice (Eds.), Oxford textbook of palliative nursing, 5th edition (Chapter 9, pp. 116-131). New York, NY: Oxford University Press.

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